REMARKS

The rejections of claims 14, 15, 21, 23 and 25-27 as being anticipated by Carme et al. under 35 U.S.C. § 102(e) and of claims 16-19 and 24 as being obvious over Carme in view of Langely under 35 U.S.C. § 103(a) are traversed. Reconsideration of each of these rejections is respectfully requested.

The Carme sound attenuation system is fundamentally different in structure and operation from that of the present invention. In terms of structure, claim 14 of the present application defines the hollow chamber as being connected to at least one sound transmitting duct on a first end thereof. The microphone is located on a second end of the hollow chamber. In Fig. 1 of Carme, however, source (loudspeaker) 6 is located at one end of the sound column 12, which end is oriented towards the sound transmitting duct. The microphone in Carme is located outside the hollow chamber and is not located directly in front of a membrane of at least one loudspeaker. Instead, the microphone 2 in the Carme system is located in a distance from the membrane of the loudspeaker.

It follows, therefore, that the Carme system functions completely differently from the present invention as well. In the Carme system, active sound attenuation is accomplished by electronically generating another sound signal having the same amplitude as the sound signal to be attenuated and being in phase opposition relative to the latter. In the present invention, however, membrane vibrations are detected to allow tenability of longitudinal resonances of the hollow chamber. The attenuation of the sound is achieved by the effect of

a controlled acoustic waveguide. The energy from the noise is transferred to the oscillations of the hollow chamber and to the membrane suspension where it is partly dissipated. As a function of the level of the amplification, the membrane vibrations, the acoustically effective length of the hollow chamber may be varied. This produces an unexpected but very favorable result that the acoustic length thus becomes greater than the actual length L (roughly four times). No such result is achievable in the Carme system.

The basic mechanism of sound attention used in the present invention is described in U.S. Patent No. 6,385,321 and is markedly different from the well-known sound attention approach used in the Carme system. In the former, sound waves which occur in the duct activate the resonance system to cause the resonance system to vibrate at and near its self induced frequency. For activation, the resonance system employs a sensor (e.g., a microphone) located in the immediate vicinity of the membrane. The output signal of the sensor undergoes an inverting linear amplification and is then used to control an electroacoustic transducer. The membrane is thus forced to perform stronger vibrations whereby the sound wave experiences a stronger attenuation.

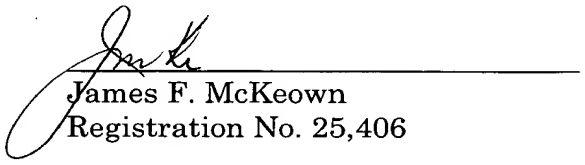
Accordingly, early and favorable action on all the claims is currently solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 029182.49857US).

Respectfully submitted,

December 29, 2004



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